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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,201	03/25/2004	Toshimitsu Hirai	9319S-000725	5986

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EXAMINER

BARRECA, NICOLE M

ART UNIT	PAPER NUMBER
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1756

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/809,201

Applicant(s)

HIRAI ET AL.

Examiner

Nicole M. Barreca

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 6-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/25/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Applicant's election with traverse of Group I, claims 1-5 in the reply filed on 5/26/05 is acknowledged. The traversal is on the ground(s) that all groups of the claims are sufficiently related to each other as to not place an undue burden on the Examiner by maintaining all groups in a single application. This is not found persuasive because the inventions of Groups I, II and III are distinct and have acquired a separate status in the art because of their divergent subject matter. An undue burden would be placed on the examiner if all groups were maintained in a single application because the search required for Group I is not required for Groups II and III and vice versa. In addition each individual search encompasses not only the subclass that the invention is classified in, but numerous other subclasses.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 6-10 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 5/26/05.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori (US 2002/0001776).

5. The entire surface of an original printing plate is processed to be hydrophobic [0018]. The surface exposure system irradiates uniform light and makes the surface of the irradiated area hydrophilic [0201]. In the case of laser scanning exposure it is necessary to adjust the laser beam diameter so that substantially uniform energy light is given to the surface of the original plate [0205]. While Mori is silent on the specific percentage to which the variation of the illumination intensity is controlled and does not disclose that the variation is controlled to 20% or less, or 15% or less, the reference does teach the surface exposure system irradiates uniform light and adjusting the laser so that the uniform light is used to expose the surface. The amount of variation in exposure intensity tolerated in an exposure process would be dependent on the specific device being manufactured and its design specifications. One of ordinary skill in the art would have to expect that uniform light would not have a large variation and that it would be desirable to control the variation to 20% or less, or 15% or less, if such variation was required for the specific device being manufactured.

6. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simonetti (US 6,451,386).

7. Polymeric materials are exposed for a period of time to UV light. The growing polymer chain becomes an integral part of the porous polymeric material causing a change from the native hydrophobic state to a modified hydrophilic water-wetting state (col.4, 27-19). Following application of the monomer solution 35, the membrane web 10

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is sandwiched between polyethylene film 40 and carried into chamber 50 containing at least one UV light source 60. Larger production systems strategically place 10-inch bulbs to optimize the resulting UV light output and web coverage. Bulbs with different wattage outputs may also be used. The membrane 10 containing monomer solution 35 is exposed to light source 60 at a focal point. The intensity or irradiance and dose of energy is measured. The intensity of light is affected by the diameter of the lamp and efficiency of the reflector. The intensity of light was measured using different light systems and using different bulbs. See Table 1A and 1B. The examples disclose the hydrophobic membrane samples being placed on the conveyer belt of a Fusion UV system and run at a belt speed of 5 ft/minute with a "D" bulb. See col.6, 15-col.10, and 11. While Simonetti teaches measuring the intensity before providing the hydrophilic property and recognizes specific factors, such as type of light system and bulb diameter, which affect the intensity of light, the reference is silent on the specific percentage to which the variation of the illumination intensity is controlled and does not disclose that the variation is controlled to 20% or less, or 15% or less. The amount of variation in exposure intensity tolerated in an exposure process would be dependent on the specific device being manufactured and its design specifications. One of ordinary skill in the art would have to expect the experimental exposure intensity measurements in Simonetti to be used to control the exposure variation to the required tolerance and that it would be desirable to control the exposure intensity variation to 20% or less, or 15% or less, if such variation was required for the specific device being manufactured.

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 1 and 2 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 6 of U.S. Patent No. 6,861,377. Although the conflicting claims are not identical, they are not patentably distinct from each other because both claim a process for surface treatment comprising changing the affinity of a surface to water or other liquid by performing a radiation exposure. While the claims of 6,861,777 do not recite that the variation is controlled to 20% or less, or 15% or less, it would have been within the ordinary skill one in the art to control the exposure intensity variation as required for the specific device being manufactured.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicole M. Barreca whose telephone number is 571-272-1379. The examiner can normally be reached on Monday-Thursday (9AM-7PM).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark F. Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nicole M Barreca
Primary Examiner
Art Unit 1756

A handwritten signature in black ink, appearing to read 'Nicole Barreca', written in a cursive style.

7/8/05